

Remarks:

Reconsideration of the application is requested.

Claims 1-14 remain in the application. Claims 9-14 have been withdrawn from consideration.

In item 3 on pages 2-3 of the above-mentioned Office action, claims 1-8 have been rejected as being anticipated by Gaouditz et al. (US Pat. No. 4,002,655) under 35 U.S.C. § 102(b).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser. (Emphasis added.)

As discussed in the response to the final Office action and the Brief on Appeal, the object of the invention of the

instant application is to remove the gases which may possibly arise within the containment in case of an accident and which are not condensable, from the inside of the containment, independently of the steam and thus via an independent branch line. According to the invention of the instant application, the drain pipe (22) is provided for this purpose. The drain pipe (22) is dimensioned and positioned, in case of a design basis accident, to lead the non-condensable gases from the surrounding region of the condenser (16) into the condensing chamber (4). The underlying consideration is that in order for the condenser to also reliably function over a long time in an abnormal occurrence, the collection or accumulation of non-condensable gases in the effective area of the condenser should be avoided. This concept is recited in claim 1 in the language such as " a drain pipe ... connecting said top region of said pressure chamber to said condensing chamber, ... said drain pipe not connected to said condenser."

The Examiner has compared the drain pipe (22) of the invention of the instant application with the overflow ducts 13, 14 and 15 of Gaouditz et al. This interpretation is simply factually unfounded.

As shown in Fig. 1, the overflow ducts 13, 14 and 15 of Gaouditz et al. clearly relate to ducts which should enable an overflow of the steam in the condensation chamber in as far-

reaching and uncomplicated a manner as possible in the abnormal occurrence, namely an unexpected steam accumulation in the pressure chamber with accompanying pressure enhancement. It is therefore clear and unmistakable that the overflow ducts 13, 14, 15 of Gaouditz et al. should be compared with the condensing pipe (14) of the invention of the instant application. The condensing pipe (14) according to the invention of the instant application also has the task to ensure, whenever required, a far-reaching and uncomplicated steam overflow from the pressure chamber in the condensing chamber. In addition, the condensing pipe (14) according to the invention of the instant application also corresponds to the dimensions and locations of the overflow ducts 13, 14, 15 in Gaouditz et al.

It is in no way evident from Gaouditz et al. why a person skilled in the art could or should come up with a measure for a targeted draining off of non-condensable gases in addition to the so-called overflow pipes. It is especially noted that the problem which is possibly caused by the non-condensable gases is not mentioned anywhere in Gaouditz et al. In addition, the overflow ducts 13, 14, 15 in Gaouditz et al. are also not at all suitable for a planned draining off of non-condensable gases, especially because the inlets of those overflow pipes are not at all disposed at a location where the non-condensable gases can accumulate.

Clearly, Gaouditz et al. do not show "a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser", as recited in claim 1 of the instant application.

Claim 1 is, therefore, believed to be patentable over Gaouditz et al. and since claims 2-8 are ultimately dependent on claim 1, they are believed to be patentable as well.

In item 5 on pages 3-5 of the above-mentioned Office action, claims 1-8 have been rejected as being unpatentable over Oosterkamp et al. (European Patent Application Publication No. 0 596 703 A1) in view of Fredell (US Pat. No. 5,008,069) and Bond et al. (FR 1,359,961) under 35 U.S.C. § 103(a).

As discussed above in detail, an important concept of the invention of the instant application is the targeted draining off of non-condensable gases from the surrounding area of the condenser. None of the cited references mentions or suggests this concept. Although it is possible that the cited references might disclose pipelines that can lead into the condensing chamber or connect at the input side to the

pressure chamber, it is not evident from the these references why a person skilled in the art would combine the individual information from the cited references to reach the important concept of the invention of the instant application, namely a drain pipe leading from the surrounding area of the condenser within the pressure chamber into the condensing chamber for targeted draining off of non-condensable gases.

The mere fact that different pipes can be provided at different locations in the power plant region does not mean that a person skilled in the art would reach the concept of the drain pipe of the invention of the instant application from the numeral possibilities of combination without any further hint.

The Examiner has alleged that Oosterkamp et al. disclose all of the features of claim 1 of the instant application except that the drain pipe is not connected to the condenser (see the third paragraph on page 4 of the Office action). However, the outlet 48 in Oosterkamp et al., which is identified by the Examiner as a drain path, is only an outlet opening which feeds the condensable gases and the not condensed part of the steam directly back into the interior of the pressure vessel. Oosterkamp et al., therefore, do not at all disclose any drain pipe in the sense of the invention of the instant application. The system of Oosterkamp et al. does not at all attack the

problem to be solved by the invention of the instant application, namely the targeted draining off of non-condensable gases. In contrast, Oosterkamp et al. simply do not relate to the concept of avoiding accumulation of non-condensable gases in the pressure chamber.

It is also not clear what hint in Oosterkamp et al. would lead a person skilled in the art to receive a suggestion or be motivated to attack the problem of purposeful draining off of non-condensable gases from the pressure chamber and to take into consideration the direct transfer of non-condensable gases into the condensation chamber according to the invention of the instant application. This kind of hint can also not be obtained from Fredell or Bond et al.

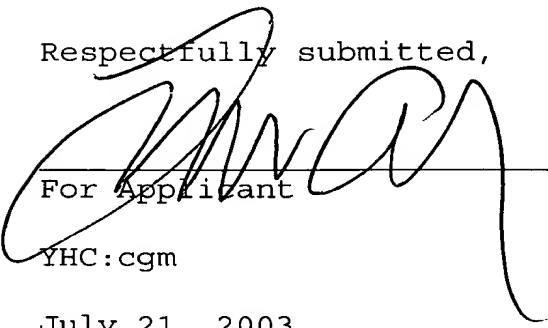
It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since claims 2-8 are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-8 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,


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